

## Amendments to the Claims

1-17: (Previously Canceled)

18: (Previously Presented) A composition comprising a substrate comprising:

- a) an array of electrodes, each comprising a binding ligand;
- b) a plurality of colloids, each comprising:
  - i) a binding ligand partner; and
  - ii) an electron transfer moiety; and
  - ~~c) a target;~~

~~wherein said binding ligand, said binding ligand partner and said target are in a complex.~~

19: (Canceled)

20. (Currently Amended) The substrate composition of ~~claims~~ claim 18 wherein said plurality of colloids further comprise a self-assembled monolayer.

21. (Currently Amended) The ~~substrate~~ composition of claim 20 wherein said self-assembling monolayer comprises an alkyl chain.

22. (Currently Amended) The ~~substrate~~ composition of ~~claims~~ claim 18 wherein said substrate is a printed circuit board.

23. (Currently Amended) ~~[[A]]~~ The substrate composition according to ~~claims~~ claim 18 wherein said electrodes are gold.

24. (Currently Amended) ~~[[A]]~~ The substrate composition according to ~~claims~~ claim 18 wherein said ETM is a transition metal complex.

25. (Currently Amended) ~~[[A]]~~ The substrate composition according to claim 24 wherein said transition metal complex is ferrocene.

26: (Withdrawn) ~~[[A]]~~ substrate composition according to ~~claims~~ claim 18 wherein said ETM is an organic ETM.

27. (Currently Amended) ~~[[A]]~~ The substrate composition according to ~~claims~~ claim 18 wherein said binding ligand is a first nucleic acid and said binding ligand partner is a second nucleic acid.

28-35: (Canceled)

36. (New) A composition comprising a substrate comprising:

- a) an array of electrodes, each comprising a binding ligand;
- b) a plurality of colloids, each comprising a binding ligand partner.

37. (New) The composition of claim 36 further comprising a detector.